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DEFENSE SYSTEMS MANAGEMENT SCHOOL

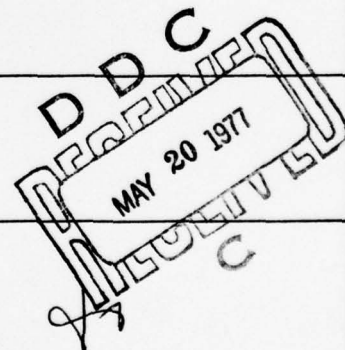STUDY TITLE:   A CHRONOMETRIC PROFILE:  A PROJECT MANAGER
MANAGES HIS TIME

STUDY GOALS:   To illustrate the scope and nature of the demands placed on
a project manager's time.

STUDY REPORT ABSTRACT

As managers are presented with an increasing multitude of decisions that
are growing more complex and time consuming, they are faced with the
absolute inelasticity of time.  Although we *(they)* are forced to expend time at a
fixed rate of sixty seconds per minute, we *(they)* can determine the way we *(they)* spend
it.  This study is a vignette addressing a two-week period in the life of
a DOD project manager.  The paper provides a quantitative perspective
of time allocation and utilization as well as the scope and nature of the
demands placed on a project manager's time.  The study intends to prompt
introspective thought concerning not only the tasks and techniques of
management, but also the essentiality of intelligent allocation of time in
the management process.

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B

# DEFENSE SYSTEMS MANAGEMENT SCHOOL

## PROGRAM MANAGEMENT COURSE
## INDIVIDUAL STUDY PROGRAM

A CHRONOMETRIC PROFILE:
A PROJECT MANAGER MANAGES
HIS TIME

STUDY REPORT
PMC 74-1

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LAPOSATA

# A CHRONOMETRIC PROFILE: A

# PROJECT MANAGER MANAGES HIS TIME

An Executive Summary
of a
Study Report
by

Joseph Samuel Laposata
Major      U.S. Army

May 1974

# EXECUTIVE SUMMARY

As managers are presented with an increasing multitude of decisions that are growing more complex and time consuming, they are faced with the absolute inelasticity of time. Although we are forced to expend time at a fixed rate of sixty seconds per minute, we can determine the way we spend it. This study is a vignette addressing a two week period in the life of a DOD project manager. The presentation provides insights into the personal and professional life style of a project manager based on actual, recorded data. The paper provides a quantitative perspective of time allocation and utilization as well as the scope and nature of the demands placed on a project manager's time.

The manner in which project managers utilize their time tells much about them and their jobs. If the profession of project management is to be enhanced, an objective detailed examination of the time related managerial behavior of the participants is imperative. This study intends to prompt introspective thought concerning not only the tasks and techniques of managment, but also the essentiality of intelligent allocation of time in the management process.

A CHRONOMETRIC PROFILE:

A PROJECT MANAGER MANAGES HIS TIME

STUDY REPORT

Presented to the Faculty

of the

Defense Systems Management School

in Partial Fulfillment of the

Program Management Course

Class 74-1

by

Joseph Samuel Laposata
Major        U.S. Army

May 1974

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A PROJECT MANAGER MANAGES HIS TIME

CHAPTER I

INTRODUCTION

## Background

Most first year physics students are confronted with Sir Isaac
Newton's suggestion that time flows at a uniform, constant speed, every
minute like the other. However, almost everyone has at some time imagined
that Sir Isaac erred in his hypothesis. We have all been in situations
where for some reason we perceive time to be remarkably uneven in move-
ment. As managers are presented with an increasing multitude of decisions
that are growing more complex and time consuming, they are faced with the
continuing inelasticity of time. Simply, time does not grow with the ex-
panding number and importance of decisions to be addressed; actually it
appears to shrink. In addition to the fixed supply of time, most of us
realize that time is a quite unique resource.

Although time is often taken for granted, it cannot be bought or
accumulated; it is totally perishable and there is no substitute for it.
It is the one truly universal condition. Although we are forced to expend
time at a fixed rate of sixty seconds per minute, we can determine the way
we spend it. Like any other resource, time is either effectively managed
or it is mismanaged.

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Peter Drucker notes that "Time is the scarcest resource and unless it is managed, nothing else can be managed". (4:12) If the management of time is indeed fundamental to all other aspects of management, one would expect a plethora of high quality literature to be available in the bibliography. Unfortunately that is not the case. More specifically, in the realm of military project management there is very little written which would illustrate the time demands placed on a project manager. At the Defense Systems Management School students are continually made aware of the variety of management responsibilities inherent in the position of a project manager. The curriculum addresses these managerial responsibilities through a series of selected management courses addressing techniques and resources required to effectively manage a DoD program. However with the words of Peter Drucker echoing in one's ear, one wonders to what degree the element of time drives the application of management techniques to a problem. Perhaps some of the answers to this question can be identified if we ask: How does a military project manager manage that most basic of all management resources, his time?

## Problem

In addressing the subject of time, Peter Drucker notes that if we rely only on our memory, we do not know how our time has been spent. Mr. Drucker further states that the first step toward executive effectiveness is to record actual time use, to factually know where your time is being spent. On the basis of analysis of these data adjustments can then be made in the managerial behavior of the executive by pruning wasteful practices

and consolidating others. Therefore, the manner in which managers utilize their time tells much about them and their jobs. If we are to enhance the profession of project management, an objective detailed examination of the time related managerial behavior of the participants is imperative. This study will address that problem in the hope of better defining the nature and scope of project management.

## Objective

The objective or purpose of the study is to illustrate the scope and nature of the demands placed on the project manager's time. Because managerial behavior includes social as well as professional aspects, the study is a vignette addressing a two week period in the life of a DOD project manager. There is no intent in this paper to analyze whether this particular project manager managed his time effectively. That task must be relegated to the subject project manager to determine. Rather, it is an attempt to portray the fashion in which one man managed his time relative to his environment. Hopefully through this study project managers and future project managers will be prompted to introspective thought concerning not only the tasks and techniques of management, but also the essentiality of intelligent allocation of time in the management process.

## Methodology

In conjunction with a recommendation by a Defense Systems Management School faculty member, a DOD project manager was asked to participate in this time management study. His response was both positive and enthusiastic. The parameters of the study were discussed with the project manager in person and via written communications. Telephonic contact was also established with his secretary to insure she had a full understanding of the project.

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A record folder was prepared for each day in the two-week test period for both the project manager and his secretary. This was done to permit maximum real time recording of data. Each folder contained a daily log to record the project manager's activity and a format instruction sheet. Tape cassettes were also provided to permit the project manager to orally embellish his written record if he desired. The survey was conducted 11 thru 24 March 1974. The format for recording the data was developed and locally tested before being dispatched to the project manager. The format instructions and examples of a daily log are at Appendix A. The methodology of time recording is similar to that recommended by Mr. Drucker in his film "Managing Time" and his book, The Effective Executive. Upon return receipt of the completed daily logs, the data was processed by the author. This processed data is presented in the text of this study.

To compliment this collection of original data a search of the literature was made to develop an academic background for discussion of this matter as well as to identify background data for use in the study.

Limitations

The key limitation of this study is that it reflects the activity of only one military project manager of a specific major project in a given stage of development. Further it reflects only his time expenditure during a two-week period in early 1974. This limitation is not as grave as it may initially appear, since the scope of the study is directed toward the details of time management. To survey more than one project manager and process the data within the available time would have been mammoth task. The effort here is one of attention to detail rather than the presentation of a wide range of less detailed material.

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# CHAPTER II

## PERSPECTIVES ON THE PROJECT MANAGER'S TIME

### General

This chapter will highlight topics addressing the work environment, the workday, productive and nonproductive work time and frequency of management actions taken in relation to productive time. These data are quantified and compared to similar studies pertaining to civilian managers. The intent here is to illustrate the broad and general aspects of time allocation in relation to military project management.

### The Work Environment

If one is to discuss the time allocation details of a two-week period in the life of a project manager, it is also necessary to have an understanding of how that survey period of time relates to a larger time frame of activity. In this light, one point which the project manager emphasized strongly in his initial conversation with the author was that he spent a significant amount of his time in job related travel. On the basis of this comment a compilation of all TDY trips made by the project manager seventy days immediately preceding the survey period was obtained. The results are shown in Table 1.

## TABLE 1
## JOB RELATED TRAVEL TIME
## 1 JAN - 11 MAR 1974

| Month | Duty Days Per Month | Duty Days Involving Travel | Percent of Duty Days Involving Travel | Number of Trips |
|---|---|---|---|---|
| January | 21 | 14 | 66.6 | 5 |
| February | 19 | 13 | 68.4 | 4 |
| March | 6 | 4 | 66.6 | 1 |
| Totals | 46 | 31 | 67.4 | 10 |

During the period 1 January thru 11 March 1974, the project manager spent all or part of thirty-one duty days away from his home station. While it is significant to note that travel requirements consumed 67.4 percent of his regularly scheduled duty days during this period, it is also significant to note that the longest consecutive period of time he spent in his office prior to the test period was four days. During the two-week test period the project manager was absent for one day on TDY. However, his seven consecutive days at home station following that TDY were the longest consecutive period spent at his office since 1 January 1974. Projected TDY requirement for the remainder of March, April and May 1974 include nine trips of an undetermined number of days. This is generally congruent with the number of trips taken in the early part of 1974. Therefore it is reasonable to assume that the relationship of travel time to office time would remain relatively constant until 1 June 1974.

## The Work Day

A Daniel Howard survey shows that the typical executive works a 63 hour week - 53 hours in the office and 10 hours out (4:8). Another study by Ross A. Webber indicates managers spend approximately 43 hours per week at the office and another 12 hours per week outside for a total 55 hour work-week (6:23). Using these studies as a basis of comparison, Table 2 illustrates that the military project manager, during the test period, spent an average of 53.5 hours per week at work and 7.4 hours per week after duty hours on job related matters for an average work-week of 60.9 hours.

TABLE 2
PROJECT MANAGER WORK WEEK
11 MARCH -- 24 MARCH 1974
(Expressed in hours)

| Test Day | Arrive at Work | Depart Work | Hours Spent at Office | Work Hours Spent Outside Office | Total Hours Spent at Work |
|---|---|---|---|---|---|
| 1 (Mon) | 0700 | 1745 | 10.75 | 1 | 11.75 |
| 2 | 0730 | 1730 | 10 | 1 | 11 |
| 3 | TDY | TDY | 10.5* | 1.2* | 11.7* |
| 4 | 0700 | 1830 | 11.5 | | 11.5 |
| 5 | 0700 | 1715 | 10.25 | 1.5 | 11.75 |
| 6 | 0915 | 1100 | 1.75 | | 1.75 |
| 7 (Sun) | | | | 1.5 | 1.5 |
| 8 (Mon) | 0700 | 1800 | 11 | 2 | 13 |
| 9 | 0700 | 1730 | 10.5 | .5 | 11 |
| 10 | 0700 | 1730 | 10.5 | | 10.5 |
| 11 | 0700 | 1645 | 9.75 | .5 | 10.25 |
| 12 | 0700 | 1730 | 10.5 | 1.5 | 12 |
| 13 | | | | 2 | 2 |
| 14 (Sun) | | | | 2 | 2 |
| Total Hours | | | 107 | 14.7 | 121.7 |
| Average Work-Week | | | 53.5 | 7.4 | 60.9 |

* Normalized work hours computed for TDY trip.

Table 2 also highlights other key points about time related management behavior. The project manager's arrival at work at 0700 hours was constant in eight out of nine workdays. It is also interesting to note that the average length of the workday at the office is 10.7 hours with the shortest day being 9.75 hours and the longest being 11.5 hours. In effect the project manager controls the time he will arrive at work, but has a lesser degree of control over when he will go home. While this study does not show any pattern relationship between total hours at work and days of the week, a survey covering a longer period of time would be required to validate or negate that concept.

Work after regular duty hours is an obvious commitment a project manager must make to his job. While the homework pattern is inconsistent during the workweek, the weekends are clearly shown in this survey as a "cleanup" period. The work is performed in the office or at home with 3.25 hours being spent the first weekend and 4.0 hours the second.

Now that we are assured that the workweek relationship in this study is similar to other managerial studies as shown in Table 3, a more intro-spective look at the workweek is appropriate.

TABLE 3
COMPARISON OF STUDY RESULTS: AVERAGE WORKWEEK OF MANAGERS

| Study | Average Workhours Spent at Office | Average Workhours Spent Outside Office | Average Total Workhours Spent Per Week |
|---|---|---|---|
| HOWARD | 53 | 10 | 63 |
| WEBBER | 43 | 12 | 55 |
| LAPOSATA | 53.5 | 7.4 | 60.9 |

## Productive Work Time

Productive work time is an essential element of this study because it prortrays the relationship between time spent at the office and work performed at the office. Distractors such as personal affairs and coffee breaks combined with lunch periods can take a sizeable slice out of the productive work day. This measurement is to a large degree within the capability of the manager to manipulate. If the nonproductive hours are considered excessive by the project manager, he can decrease his nonproductive time by eliminating or consolidating those nonproductive functions to permit more productive time availability. Table 4 shows the in-office productive time relationship in this study.

TABLE 4
PROJECT MANAGER PRODUCTIVE WORK TIME
11 MARCH -- 24 MARCH 1974

| Test Day | Hours Spent at Office | Hours Productive Work | Hours Nonproductive Work |
|---|---|---|---|
| 1 (Mon) | 10.75 | 8.75 | 2 |
| 2 | 10 | 9.58 | .42 |
| 3 | 10.5 | 10.5 | - |
| 4 | 11.5 | 10 | 1.5 |
| 5 | 10.25 | 9 | 1.25 |
| 6 | 1.75 | 1.75 | - |
| 7 (Sun) | - | - | - |
| 8 (Mon) | 11 | 7.25 | 3.75 |
| 9 | 10.5 | 10 | .5 |
| 10 | 10.5 | 8.75 | 1.75 |
| 11 | 9.75 | 9.25 | .5 |
| 12 | 10.5 | 9.16 | 1.34 |
| 13 | - | - | - |
| 14 (Sun) | - | - | - |
| Totals | 107 | 93.99 | 13.01 |

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Out of 107 hours spent on the job during the test period, 13.01 hours were expended for nonproductive activities. Perhaps better said, 87.8 percent of the time that the project manager is on the job, he is employed in the productive work process. The obvious question at this point is "What activities contributed to the nonproductive time of the project manager?" Table 5 illustrates eating lunch and exercising at the gym accounted for

TABLE 5
PROJECT MANAGER NONPRODUCTIVE WORK TIME
11 MARCH -- 24 MARCH 1974

| Act | Hours of Nonproductive Time | Percent Nonproductive Time |
|---|---|---|
| Lunch | 3.6 | 27.6 |
| Gym | 5 | 38.5 |
| Physical | .75 | 5.8 |
| Dentist | .58 | 4.5 |
| X-Rays | .25 | 1.9 |
| Enroute Time | 1.66 | 12.7 |
| Visit Employee in Hospital | .83 | 6.4 |
| Personal Affairs | .34 | 2.6 |
| Total | 13.01 | 100 |

66.1 percent of the project managers nonproductive time. If one would consider at least one hour per day for lunch to be a permissable nonproductive function, Table 5 shows that the project manager does not take his full lunch hour every day for meals or exercise. Lunch and gym total 8.6 hours out of the 10 hours available during the survey period, indicating that the project manager on occasion works thru portions of his mid-day hour break. Enroute time to the hospital and dentist accumulated 12.7 percent of the nonproductive time and the other factors addressing body maintenance, personal affairs and visiting an employee in the hospital

consumed 21.2 percent of the nonproductive time. Therefore, exclusive of the lunch hour breaks for meals and exercise, only 4.41 hours of nonproductive time were spent over the two week period.

## Number of Acts Performed in Relation to Productive Time

During the study period the project manager performed 253 separate acts during his 83.5 hours of productive work in the office. (10.5 hours of TDY time have been exluded for this analysis.) An example of an act is receipt of a phone call, reviewing incoming correspondence or talking to a subordinate. Simple arithmetic then indicated that the mean performance time for an act during the productive work period was .33 hours or 19.8 minutes. The range of time per uninterrupted act was from 5 to 120 minutes. The mean number of acts per day was 28.1. A similar study was conducted by Sune Carlson on Swedish managing directors (4:20). In the Carlson study none of the manager, with one exception, was able to work more than 20 minutes at a time on one act. Most of them had 34 to 40 different things to do during a typical day, each lasting 3 to 20 minutes. The subject project manager compares favorably with the Swedish managers.

## Summary

This chapter has highlighted the demanding requirements for job related travel placed on the subject project manager. Being away from

the office two-thirds of the time, the project manager maintains a work week of over 60 hours when he is at home station. During this average work week 87.8 percent of his time is directed toward productive enterprises. 12.2 percent of his time is expended in nonproductive efforts and 66 percent of this nonproductive time is taken up by attending to routine, necessary physiological requirements. During productive time the project manager averaged 28 management acts per day with a mean performance time of 20 minutes. In general, the subject project manager is frequently away from his office, but when he is in, he is engaged in productive enterprises with nonproductive time held to a minimum.

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# CHAPTER III

## TIME RELATIONSHIPS WITH INDIVIDUALS AND ORGANIZATIONS

### General

This chapter will address the manner in which the project manager allocated his time in relation to associations with other individuals and organizations. This data has been developed based on productive time, exclusive of the one day TDY trip on 13 March 1974.

### The Project Manager: Responder or Generator?

Having seen that our subject project manager is actively engaged in productive enterprises during the workday, the question then arises, "Is the project manager working on tasks he has generated or is he working on tasks initiated by others?" Table 6 provides a number of insights into this question.

TABLE 6
PROJECT MANAGER GENERATED ACTIONS VERUS PROJECT
MANAGER RESPONDED ACTIONS

| Test Day | Hours of Generated Actions | Hours of Responded Actions | Number of Generated Actions | Number of Responded Actions |
|---|---|---|---|---|
| 1 (Mon) | 5.1 | 3.6 | 16 | 15 |
| 2 | 5.5 | 4.2 | 13 | 20 |
| 3 | TDY | TDY | TDY | TDY |
| 4 | 6.8 | 3.1 | 19 | 13 |
| 5 | 6.25 | 2.75 | 18 | 12 |
| 6 | – | 1.75 | – | – |
| 7 (Sun) | – | – | – | – |
| 8 (Mon) | 2.9 | 4.4 | 10 | 15 |
| 9 | 4.6 | 5.3 | 11 | 14 |
| 10 | 6.8 | 1.9 | 18 | 7 |

| | | | | |
|---|---|---|---|---|
| 11 | 4.75 | 4.5 | 9 | 11 |
| 12 | 2.7 | 6.6 | 13 | 17 |
| 13 | - | - | -- | - |
| 14 (Sun) | -- | -- | -- | - |
| Totals | 45.4 | 38.1 | 127 | 126 |
| Percent of Total Productive Time | 54.4 | 45.6 | | |

It is interesting to note that of the 253 total acts performed during the survey, the project manager generated 127 acts and responded to 126 acts. While it appears reasonable to say that there is parity in the number of actions generated by or responded to by the project manager, the amount of time spent in performing these acts is not nearly as evenly balanced. In relation to project manager generated acts, it took 54.4 percent of productive time to accomplish 127 acts. The remaining 45.6 percent of productive time was consumed responding to the remaining 126 actions. Simply, the project manager spent more time on actions he generated than on those actions he responded to, although the number of actions taken was virtually equal. Evaluation of the merit of this relationship must fall on the project manager. However, it would be interesting to observe this relationship over a longer survey period to determine if the project manager retains the control of over 50 percent of his time while in the office.

## Degree of Activity with Organizations and Individuals

For the survey period the individuals and organizations with whom the project manager did business were divided into five categories: Superiors, Subordinates, Lateral and Diagonal Activities in DOD, Civilians outside

DOD related to program Activities, and Civilians outside DOD related to Personal Affairs. The relationship between the project manager and these activities is shown in Table 7.

TABLE 7
PROJECT MANAGER RELATIONSHIPS WITH
INDIVIDUALS AND ORGANIZATIONS

| Individual Organization | Number Incoming Actions | Number PM Generated Actions | Total Number of Actions | Percent of Total Actions |
|---|---|---|---|---|
| Superiors | 46 | 10 | 56 | 18.9 |
| Subordinates | 42 | 89 | 131 | 44.2 |
| Lateral & Diagonal DOD Activities | 26 | 22 | 48 | 16.3 |
| Civilians Outside DOD Related to Program Activities | 34 | 10 | 44 | 14.8 |
| Civilians Outside DOD Related to Personal Affairs | 8 | 9 | 17 | 5.8 |

There is nothing particularly startling about these data as they, for the most part, quantify what one intuitively knows. Actions coming into the project manager from his superiors outnumber those outgoing to superiors by a four-to-one margin. Civilians outside DOD related to program activities, or the program contractor category, show incoming communications have a three-to-one edge over outgoing communications. While there is a near parity in communications with lateral and diagonal DOD activities and civilians related to personal affairs, the project manager continues to illustrate his control of the in-house situation; he dominates outgoing to incoming communications relative to subordinates by a two-to-one margin. It is also a point to make that project manager/

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subordinate dialogue is two to three times greater than any other channel

of communication. The net result of this analysis is that the project

manager addresses his subordinates more frequently than any other group

or agency. He dominates that channel of communication by generating most

of the actions, just as he is dominated by his superiors.

# CHAPTER IV

## COMMUNICATION MODES

### General

The communication modes used as criteria for the study were the telephone, written material, two-person talks and meetings. This chapter will address the relationship of communication modes to the time allocation process.

### Telephone

The telephone bears a great burden of potential as a time trap for most managers. The subject project manager's use of the telephone is noted in Table 8 below.

TABLE 8
PROJECT MANAGER TELEPHONE UTILIZATION

| ITEM | RESPONSE |
|------|----------|
| Number of Incoming Calls | 60 Calls |
| Average Length Per Call | 11.1 Minutes |
| Number of Outgoing Calls | 20 Calls |
| Average Length Per Call | 10.7 Minutes |
| Range of Call Duration | 5 - 30 Minutes |
| Total Time Spent on Telephone | 14.6 Hours |
| Telephone Use Time in Relation to Productive Time | 17.5 Percent of Productive Time Spent on the Telephone |

The project manager was not the master of the telephone. Incoming calls outnumbered outgoing calls by a three-to-one margin. The slight variation in the length of incoming and outgoing calls and the average call length of 11 minutes, coupled with a range of 5-30 minutes in call duration, indicated that the project manager did not get involved in many long term telephone conversations. Despite the relatively short duration of phone calls, the volume of calls consumed a significant 17.5 percent of the manager's productive time.

Table 9 provides an interesting insight on the individuals and organizations with whom the project manager spoke on the telephone.

TABLE 9
PROJECT MANAGER TELEPHONE USE RELATIVE TO
INDIVIDUALS AND ORGANIZATIONS

| Individual Organization | Number of Incoming Calls | Number of Outgoing Calls |
|---|---|---|
| Superiors | 30 | 3 |
| Subordinates | 2 | 2 |
| Lateral & Diagonal DOD Activities | 9 | 12 |
| Civilians Outside DOD Related to Program Activities | 14 | 2 |
| Civilians Outside DOD Related to Personal Affairs | 5 | 1 |
| Totals | 60 | 20 |

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The data clearly shows the project manager received ten times more calls from his superiors and seven times more calls from civilians outside DOD related to program activities than he generated. He used the phone to talk to his subordinates infrequently and he made or received only six personal calls at work during the survey period. With a telephonic correspondence pattern of this nature (50 percent of all incoming calls from superiors), the project manager will be hard pressed to reduce his telephone use time relative to productive time.

Table 10 illustrates the type of business conducted on the telephone by the project manager.

TABLE 10
FREQUENCY OF MANAGERIAL ACTIVITY
CONDUCTED VIA TELEPHONE

| Activity | Number of Incoming Calls | Number of Outgoing Calls |
|----------|--------------------------|--------------------------|
| Planning | 29 | 10 |
| Consulting/Advising | 16 | 10 |
| Directing/Controlling | 3 | 1 |
| Coordinating/Staffing | 6 | 11 |
| Reviewing | 2 | |
| Non-Managerial/Personal | 6 | 1 |
| Totals | 62 | 33 |

The totals of incoming and outgoing calls do not equal data expressed in previous tables because in a number of phone calls the project manager addressed

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more than one type of management activity. The planning function was clearly the predominant activity conducted over the telephone. The small quantity of direction that was performed over the phone was incoming, while consulting/advising was the second most frequent use of the phone. Perhaps the most significant element of Table 10 is that 41 percent of all activities conducted on the telephone was in a planning mode.

## Summary

During the survey period the use of the telephone consumed a little less than one-fifth of the project manager's productive time. 75 percent of all calls were incoming and 50 percent of those calls were from superiors. Planning was the most frequent activity conducted on the telephone, accounting for 41 percent of all calls. Consulting/advising addressed 27.3 percent of all phone conversations. In general, the project manager did not control the telephone. His use of the instrument appears judicious, but the density of calls addressing planning activities, including and in addition to those from his superiors, kept telephone use up in relation to productive time.

## Written Documents

While we all complain about paperwork, written material is the backbone of our communication process. During the survey period the project manager spent 16.6 hours or 19.8 percent of his productive time communicating via the written word. The project manager accomplished 45 separate acts

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associated with written communications. The mean time for each act was 22 minutes and the range of time was from 5 to 60 minutes. The project manager maintained the rather high mean time for an uninterrupted act in written communications because of his schedule. He was habitual in starting and closing each day with an uninterrupted work period on paperwork. Incoming communications consumed 69.5 percent of the project manager's time dedicated to written communications compared to 30.5 percent for outgoing correspondence In general, like the telephone, the project manager did not control written communications. Tying these two points together we can now see that 37.3 percent of the project manager's productive time relative to communication means was not under his control.

Table 11 illustrates those individuals and organizations with whom the project manager maintained a written dialogue. This data comes as no great shock to an experienced staff officer: The project manager had paper coming in from everyone.

TABLE 11
WRITTEN COMMUNICATIONS RELATIVE TO
INDIVIDUALS AND ORGANIZATIONS

| Individual/Organization | Number of Acts Incoming to PM | Number of Acts Outgoing from PM |
|---|---|---|
| Superiors | 10 | 5 |
| Subordinates | 16 | 10 |
| Lateral & Diagonal DOD Activities | 18 | 3 |
| Civilians Outside DOD Related to Program Activities | 14 | 5 |
| Civilians Outside DOD Related to Personal Affairs | 8 | 1 |
| Totals | 66 | 24 |

While this chart does not reflect the number of pieces of paper the project manager handled during the survey period, it does tell us that there was a general organizational balance pertaining to incoming documents, whereas on outgoing documents the project manager dominated the communication process with his subordinates. We previously saw that planning was the most significant activity discussed over the telephone. Table 12 shows us that the project manager actually took little personal action on written materials, as 63 percent of all acts performed were of a reviewing nature. What is surprising about this chart is that there was such a dichotomy in the planning activity. Planning was not a function addressed via written material, but was the key element in telephonic communications.

TABLE 12
MANAGERIAL ACTIVITIES CONDUCTED VIA
WRITTEN MATERIALS

| Activity | Number of Acts Incoming to PM | Number of Acts Outgoing From PM |
|---|---|---|
| Planning | - | - |
| Consulting/Advising | - | 2 |
| Directing/Controlling | - | 3 |
| Coordinating/Staffing | 8 | 8 |
| Reviewing | 29 | 10 |
| Thinking/Researching | 1 | 1 |

## Summary

The project manager spent approximately 20 percent of his productive time communicating via written material; while the acts taken on incoming

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material were three-to-one to outgoing material, there was a general organ-
izational balance between the project manager and other individuals and
activities.  The lack of planning being conducted through written communi-
cation may be indicative of the management style of the project manager's
environment, but the heavy emphasis on the reviewing function was predict-
table.  As with the telephone, the project manager was a responder rrelative
to written correspondence.


Two-Person Talks

This mode of communication is highly influenced by a manager and the
subject project manager was no exception.  16.3 hours or 19.5 percent of
the project manager's productive time was consumed by two-person talks.
Table 13 illustrates general data related to two-person talks.

TABLE 13
FREQUENCY AND LENGTH OF TWO-PERSON TALKS

| Item | Response |
| --- | --- |
| Number of Two-Person Talks Generated by Others | 15 |
| Average Length of Talks Generated by Others | 20.6 Minutes |
| Range of Talk Duration Generated by Others | 10 - 45 Minutes |
| Number of Two-Person Talks Generated by the PM | 41 |
| Average Length of Talks Generated by the PM | 16.3 Minutes |
| Range of Talk Duration Generated by the PM | 4 - 45 Minutes |

While the project manager held a three-to-one edge in initiating two-person talks, the duration and range of meeting periods was similar. The most significant aspect thus far relative to two-person talks is that it is the first communicative element where the project manager could influence the action, and he took that initiative. These data infer that the project manager liked to do business on an "eyeball to eyeball" basis. In initiating actions he made only judicious use of the phone and written material, but extended himself more fully in the area of face-to-face personal relations. Table 14 illustrates those parties with whom the project manager conducted his two-person talks.

TABLE 14
TWO-PERSON TALKS RELATIVE TO
INDIVIDUALS AND ORGANIZATIONS

| Individuals Organizations | Number of Talks Called by Others | Number of Talks Generated by PM |
|---|---|---|
| Superiors | 3 | -- |
| Subordinates | 10 | 38 |
| Lateral & Diagonal DOD Activities | 1 | 3 |
| Civilians Outside DOD Related to Program Activities | 1 | - |
| Civilians Outside DOD Related to Personal Affairs | -- | - |
| Totals | 15 | 41 |

Now that we have a handle on the project manager's desires to talk face-to-face, we see that his subordinates fully dominated his attention. This is not surprising considering his job related travel schedule. The pattern of dialogue established between the project manager and his subordinates which was illustrated in previous communication modes continues in this form of communication. The fact that the project manager generated four times more meetings with his subordinates than were requested of him cannot be interpreted here.

What management activities were discussed during these two-person talks? It was virtually an even balance between consulting/advising and directing/controlling, with all other activities in minor roles.

## Summary

The project manager frequently "gets out of the word" to his subordinates by way of two-person talks. One may infer from this relationship that if the project manager is going to tell someone to do something, he is probably going to do it on a person-to-person basis.

## Meetings

This mode of communication is differentiated from two-person talks in that three or more persons were present during the session. We have just seen that the project manager prefers to employ a more personal aspect in communicating with people. Consequently we might expect that meetings would also be a preferred mode of communication for the subject project manager. Table 15 illustrates the project manager's attendance at and use of meetings during the survey period.

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TABLE 15
PROJECT MANAGER'S ATTENDANCE AT MEETINGS

| Item | Response |
|------|----------|
| Number of Meetings Called by Others | 20 Meetings |
| Average Length of Meetings Called by Others | 32 Minutes |
| Range of Meeting Duration Called by Others | 5 - 60 Minutes |
| Number of Meetings Called by the PM | 47 Meetings |
| Average Length of Meetings Called by the PM | 30.4 Minutes |
| Range of Meeting Duration Called by the PM | 5 - 120 Minutes |
| Total Time Spent at Meetings | 34.5 Hours |
| Total Number of Meetings | 67 Meetings |
| Time Spent at Meetings Relative to Productive Time | 41.3 Percent of Productive Time Was Spent at Meetings |

These data reflect that when the project manager was involved in productive work during the survey period, approximately two-fifths of the time he was at a meeting. Perhaps even more significant, the project manager called 70 percent of the meetings. Combining this communicative technique with the two-person talks, we can see that the project manager spent 60.8 percent of his productive time meeting with people. While the longest meeting conducted is reported as 120 minutes, this represents the longest meeting period uninterrupted by another act. Regardless of who called the meeting, it averaged between 30 and 32 minutes in length.

71 percent of the meetings were conducted with subordinates, 12 percent with civilians outside DOD related to program activities, 7 percent with superiors and the remaining 10 percent were spread through the other categories.  Of some interest is the point that subordinates in the project manager's office generated 25 percent of the meetings conducted with the project manager.  That is almost the same relationship that existed in the two-person communication technique.

The management activity conducted at these meetings is shown in Table 16.

TABLE 16
MANAGERIAL ACTIVITY CONDUCTED
VIA MEETINGS

| Activity | Meetings Called By Others | Meetings Called By the PM |
|---|---|---|
| Planning | 12 | 19 |
| Consulting/Advising | 2 | 3 |
| Directing/Controlling | 3 | 13 |
| Coordinating/Staffing | 4 | 1 |
| Reviewing | 6 | 5 |
| Briefings/Presentations | 2 | 15 |
| Non-Managerial/Personal | 1 | – |

Planning turned out to be the prime managerial activity addressed during meetings.  Because planning was the main activity conducted on the telephone, one can see a number of reasons why this relationship might exist, but all would be pure conjecture and will not be discussed here. Again it can be seen that the project manager performed his directing/

controlling functions in a people-to-people mode based on the activity

noted in Table 16. While a variation of the theme, fifteen of the meet-

ings conducted by the project manager were executed in a briefing format.


## Summary

The meeting was the most commonly used technique for communications

employed by the project manager. The meeting formats for the most part

were kept under control and were not prone to excesses in time. The fact

that the project manager generated almost three-fourths of all meetings is

an indication of a management style. This is obviously a successful

method of doing business for the subject project manager.


## Summary, Chapter IV

How did the project manager communicate during the survey period?

Table 17 highlights the project manager's utilization of communication

modes during the survey period.

TABLE 17
PROGRAM MANAGER'S UTILIZATION
OF COMMUNICATION MODES

| Mode | Percent of Productive Time |
|------|----------------------------|
| Telephone | 17.5 |
| Written Materials | 19.8 |
| Two-Person Talks | 19.5 |
| Meetings | 41.3 |
| Introspective Thought | 1.9 |
| Total | 100 |

The 1.9 percent of productive time relative to introspective thought was not addressed previously in this chapter, but it is significant because it represents a period of time when the project manager was communicating with himself. At first glance one might look at this Table and comment that the project manager was trapped by the "meeting syndrome," but a quick reference to the text of this paper will relate that 70 percent of these meetings were called by the project manager.

# CHAPTER V

## CONDUCT OF MANAGERIAL ACTIVITY IN RELATION TO TIME

### General

This chapter will address the relationship between selected managerial activities and time. The managerial activities shown below to be addressed in this chapter are the same elements that were discussed in relation to communication modes. These activities were selected as criteria for the study because of their wide use in military and civilian management community.

> Planning
>
> Consulting/Advising
>
> Directing/Controlling
>
> Coordinating/Staffing
>
> Reviewing

Now the intent is to portray the degree to which each element exclusively relates to the project manager's time and also to what degree the activities absorb time when conducted in conjunction with each other.

### The Scale of Activity

This material has been developed to determine exactly what tasks were performed by the project manager. Perhaps by an objective insight into this subject area, a more precise definition of the skills required for successful project management can be derived. This subject in itself could be the basis for a thesis. As a rough cut at the topic,

Table 18 portrays the relationship between managerial activities performed and time. Because two or more activities are often performed in one act, Table 18 illustrates time exclusively dedicated to the activity and time spent per activity in conjunction with others.

TABLE 18
RELATIONSHIP BETWEEN MANAGERIAL ACTIVITIES
PERFORMED AND TIME (EXPRESSED IN HOURS)

| Activity | Time Spent Exclusively | Time Spent in Conjunction With Other Activities | Total Time Expenditure |
|---|---|---|---|
| Planning | 17.08 | 8.58 | 25.66 |
| Consulting/Advising | 6.58 | 5.41 | 11.99 |
| Directing/Controlling | 7.25 | 5.91 | 13.16 |
| Coordinating/Staffing | 3.41 | 7.08 | 10.49 |
| Reviewing | 15.33 | 11.41 | 26.74 |
| Totals | 49.65 | 38.39 | 88.04* |

* Due to concurrence of data, the survey period productive time factor of 85.5 is inappropriate here.

As might have been anticipated from the previous chapter, reviewing and planning were the two activities performed most frequently by the project manager. In relation to time spent exclusively on planning and reviewing by the project manager, 34.4 and 30.8 percent respectively, or a total of 65.2 percent of the project manager's time in relation to managerial activities, was devoted to these functions. However, the activities represent attention to two entirely different functions. Reviewing is an act that has a present/past time context. That is, project manager evaluated something that had already happened or was

currently happening, whereas planning is definitely future oriented. It may be significant that the two acts are so closely related. Reviewing may just provide the feedback necessary for pertinent planning.

It is also interesting to note that reviewing or the past/present orientation was a joint event in conjunction with other activities far more often than was planning, which was dealt with on a more exclusive basis by the project manager. This may be forced somewhat by the criteria imposed on the survey, but the degree cannot be determined. Nonetheless, the difference of 8.5 hours between exclusive and in-conjunction time for planning is almost twice as large as the difference of 3.9 hours for the reviewing activity. Planning appears to be a more exclusive event than reviewing in this study.

If one accepts the concept that planning is making tomorrow's decision today, the project manager was also deeply involved in decision making. Present time directing/controlling activity absorbed 14.9 percent of the project manager's time. Coupled with the planning factors, 44.1 percent of the project manager's time was decision oriented.

The activities of consulting/advising and coordinating/staffing appear in this case to be corollary to the planning/reviewing combination and quite clearly assume secondary roles in the project manager's time utilization.

## Summary

In general, the project manager during the survey period directed his attention toward the future through his planning efforts, while he maintained

the day-to-day business of the shop.  He illustrated that he retained a
firm hand on the office by the extent to which the controlling/directing
activities consumed his time.  Through the demonstrated relationship of
time spent on managerial activities, the essence of project management as
practiced by the subject project manager begins to solidify.

# CHAPTER VI

## OUTSIDE THE OFFICE

### General

Having previously looked at the project manager's allocation of time in relation to his professional duties during the work day, this chapter will address the work the project manager takes home, his personal and familial responsibilities and leisure hours.

### Homework

All of the work taken home was written material. 81.4 percent of this material was generated by the project manager, whereas he was responding to the other 18.6 percent of the homework. Not surprisingly, 55.6 percent of all work done at home was related to subordinates, 37 percent to superiors and 7.4 percent to civilians outside DOD related to program activities. Table 19 portrays the managerial activities conducted during the homework sessions. Directing/controlling was the predominating activity performed during the homework sessions. With all homework being written material, it appears the project manager used after duty hours to prepare his personal written directives to others.

TABLE 19
MANAGER ACTIVITIES CONDUCTED
DURING HOMEWORK SESSIONS

| Activity | Time Spent in Hours | Percent of Homework Time |
|---|---|---|
| Planning | .5 | 3.7 |
| Consulting/Advising | 3.5 | 25.9 |
| Directing/Controlling | 5 | 37.1 |
| Coordinating/Staffing | 2 | 14.8 |
| Reviewing | 1.5 | 11.1 |
| Thinking/Research | 1 | 7.4 |

## Health and Welfare

There is little question that the pressures of a manager's life style can lead to a degradation in the health of an individual unless he attends to his physiological needs. Consequently the project manager's health habits were surveyed. During the work week the project manager averaged 6.27 hours of sleep every evening. His sleeping habits were quite regular with six hours per night being normal. On the weekends the project manager averaged 7.75 hours per night. During the survey period he averaged 6.7 hours of sleep per night. For what it is worth, the project manager was asleep for 27.8 percent of the survey period.

Mealtimes showed the project manager spent an average of 15 minutes at breakfast during the work week. He skipped breakfast on only one occasion during the survey period. The project manager managed to eat lunch every day, but he never spent more than 30 minutes eating. This time expenditure was probably dependent upon his mid-day exercise program and workload, which ever was more pressing. Dinner in the evenings was rarely an abbreviated encounter and ample time was allocated to enjoy a meal after work.

The project manager managed to set aside some time to relax during non-duty hours almost every day. He averaged 1.6 hours of relaxation per day, which is somewhat skewed by heavier relaxing periods on the weekends. 6.5 percent of the survey period was spent relaxing after duty hours.

Familial responsibilities consumed 6.8 percent of the project manager's time during the survey period. This time was rather well balanced during the two weeks.

Church and personal entertainment consumed 8.3 percent of the project manager's time. This time was heavily weekend oriented.

Commuting to and from work, personal affairs, job related social activities and other miscellaneous functions rounded out the remainder of the survey period and none was significant in relation to time.

## Summary

A summary of non-duty time is illustrated in Table 20.

TABLE 20
NONDUTY TIME EXPENDITURES

| Activity | Hours Expended | Percent of Survey Period |
|---|---|---|
| Sleeping | 93.7 | 27.8 |
| Eating | 19.5 | 5.8 |
| Commuting to Work | 5 | 1.5 |
| Relaxing | 22.3 | 6.6 |
| Home & Family Chores | 22.9 | 6.8 |
| Church/Personal and Family Entertainment | 28.3 | 8.4 |
| Personal Affairs | 10.7 | 3.3 |
| Job Related Social Affairs | 3.8 | 1.2 |
| Other | 8.1 | 2.4 |
| Totals | 214.3 | 63.8 |

Non-duty activities consumed 63.8 percent of the project manager's available time during the survey period. However, one can observe that

in relation to time, performance of duty consumed 36.2 percent or a little

more than one-third of the total time available to the manager.

# CHAPTER VII

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### Summary

The purpose of this study was to compile and present a detailed examination of the time related managerial behavior of a DOD project manager. This summary will address the key aspects of that issue.

Perhaps the most significant item of data in the survey is that the project manager was away from home station for all or part of 31 duty days during the period 1 January through 11 March 1974. Additionally, projected travel for March, April and May is similar to the amount of travel conducted during the first two months of the year. The so called "Outside Man" orientation concept ascribed to by some project managers was reinforced in data by the subject project manager. When in the office the project manager was actively involved in productive work processes and engaged in few nonproductive acts. Significantly he kept his uninterrupted work span on an individual act at an average of 20 minutes.

It cannot be said with authority that the project manager was either a generator-of or a responder-to management activity. The survey period data shows a relatively even split between time and acts expended on these two functions. As might have been expected, the project manager's most frequent activity was conducted in relation with his subordinates.

Displaying a judicious use of the telephone as a communicative mode, the phone was not an inordinate consumer of the project manager's time.

Surprisingly, written communications were about equal in time consumption to the telphone and the project manager was primarily in a reviewing role in relation to paperwork.  Two-person talks and meetings of three or more persons were the preferred modes of communication for the project manager and consumed the bulk of communication time.  The project manager called approximately 70 percent of all meetings during the survey period. Planning and reviewing were the two most time consuming managerial activities engaged in by the project manager.  The even split of these functions would indicate an orientation toward future operations as well as maintenance of day-to-day activities.

The personal or off-duty time related behavior patterns of the project manager were well balanced with apparent adequate attention being paid to personal and familial responsibilities.  The project manager made a definite commitment to his job during non-duty hours in that he regularly addressed job related work at home in the evenings and weekends.

Conclusions

The foremost conclusion to be made is that the survey of the project manager's time related managerial behavior did indeed accomplish its objective.  That is, this paper does provide a quantitative perspective of time allocation and utilization by a DOD project manager.  This data may be quite useful to the subject project manager in assessing his personal time allocation procedures.  However, this study also provides valuable insights into the personal and professional life style of a project manager

based on recorded, processed data and not emotion, memory or visceral stimulation.

Relative to the program manager's activity during the survey period, the density of job related travel in relation to duty days leads one to conclude that the necessity for a competent, experienced project deputy and self-starting subordinates cannot be compromised. Without these type individuals on-board the success of the program would be jeopardized. In conjunction with this factor, the project manager must maintain a strong "self". It is reasonable to conclude that if the project manager can be prodded (by subordinates) or bullied by (superiors) into engaging in time consuming activities with low work production potential when he is in the office he will soon find himself in a "short-of-time" position. The subject project manager appears to have a strong "self" as reflected by his control of his daily activities.

It is also concluded that the project manager has control of more productive work time than he may imagine. With approximately 54 percent of in-office productive work time being apportioned by the project manager, the survey indicates the PM generates the use of more time than is consumed by actions he responds to.

The need for speaking and listening skills and a sensitivity in matters concerning interpersonal relations are imperative qualities for the project manager. With approximately 60 percent of his productive time spent speaking or listening to people these qualities are basic tools of the trade. With the volume of paperwork addressed in daily activities, skills in

reading large quantities of materials rapidly, with retention, as well as analytical reading skills are concluded as being another quality necessary in a project manager.

The managerial function of planning was a significant consumer of the project manager's time. To plan is to deal with uncertainty and the quantitative and qualitative means of addressing that uncertainty are skills that appear inherent in project management. On the basis of the study data it is concluded that the project manager must be a competent planner.

The physical location of the project manager's home in relation to his office is a key factor. If the project manager were involved in two hours per day commuting to and from work as opposed to the thirty minutes expended by the subject PM, it can be concluded that the additional commuting time would be taken from the job, family or both. Commuting time could be a significant factor in job performance.

The project manager, like any other husband and father, has familial responsibilities in addition to all other professional responsibilities he bears. With frequent absences from home, the need for a balanced outlook to the family is concluded to be a necessity if the project manager is to go to work each morning free of domestic problems.

While a number of conclusions have been discussed relative to the project manager's activity during the survey period, they can be summarized by noting that the project management business is time demanding, time consuming and in relation to time, difficult to control. Peter Drucker's words come back to us again, "Time is the scarest resource and unless it is managed, nothing else can be managed." This study reaffirms that proposition.

Recommendations

It is realized that this paper is only a very small sample of a very large population. Consequently if this type data is to be further developed and refined, additional studies of this nature are imperative. Since the Project Manager Courses at the Defense Systems Management School are a built in research asset and because students are always searching for a meaningful, interesting topic for a research paper, it is recommended that in the next Project Manager Course one or two students be offered the opportunity to conduct research in this area. Obtaining data based on all Service project managers' time related managerial behavior would provide some measure of time demands placed on the project manager by Service orientation and types of project manager organizations. Obtaining similar data on a civilian project manager would also provide the opportunity for an interesting comparative analysis of time and management.

This type of work needs doing. Let's find the time to do it.

## FORMAT INSTRUCTIONS

Survey criteria (Atch I) have been developed to assist in organizing
and recording entries in the daily log.  These criteria provide a type
shorthand for recording data.  To provide for commonality in the semantic
application of terms used in the survey criteria, the discussion below
expands on the full intent of each criteria.

## SURVEY CRITERIA

GENERATING ACTION
1.  Incoming to Project Manager
2.  Generated by Project Manager

Every action the manager is involved in is a result of external stimuli
causing him to do something or because of actions he generates.  These
criteria have been included to determine to what degree the Project
Manager is responding to external stimuli as opposed to generating actions
within the system.

INITIATED BY/DISPATCHED TO
3.  Superiors
4.  Subordinates
5.  Lateral and diagonal activities in DOD
6.  Civilians outside DOD related to Program activities
7.  Civilians outside DOD related to personal affairs

To determine who is causing the external action stimuli and/or to whom
the Project Manager is generating action, entries 3 thru 7 provide five
categories for response.  For example, any contact with a DOD activity
outside the Project Manager's established chain of command would fall within
criteria 5; a phone call from a contractor would fall within criteria 6;
a visit from the Project Manager's wife or a call from a friend would be
in criteria 7.

COMMUNICATIONS CONDUCTED BY
8.  Telephone
9.  Written
10.  Two-person talks
11.  Meetings

These criteria have been developed to provide a measure of how the manager
communicates and conducts his business.  The criteria "Written" includes
everything on paper.  If the Project Manager takes fifteen minutes each
afternoon to read the Wall Street Journal or to survey correspondence in his
"in-box", criteria 9 would be appropriate.

ACTIVITY ELEMENT
12.  Planning
13.  Consulting/Advising

14. Directing/Controlling
15. Coordinating/Staffing
16. Reviewing
17. Thinking/Researching
18. Briefings/Presentations
19. Non-managerial/Personal affairs

These criteria relate the kinds of activity being conducted. Since some of these terms are subject to a band of semantic applications, each criteria will be discussed below.

12. Planning - Normal connotation.
13. Consulting/Advising - Seeking or giving advice and recommendations.
14. Directing/Controlling - Exercising the authority to direct, command or regulate.
15. Coordinating/Staffing - Normal Army connotation.
16. Reviewing - To examine a document or situation; primarily an analysis process.
17. Thinking/Reseacrching - To examine a document or situation; primarily a synthesis process.
18. Briefings/Presentation - Attendance at, presentation of, or preparation for.
19. Non-managerial/Personal affairs - Visit to PX, coffee break, presentation of an award, etc.

## HEALTH AND WELFARE

These criteria are self-explanatory and are included to obtain a perspective on the personal side of the Project Manager's time.

## PREPARATION OF THE DAILY LOG

Almost all events logged in the diary will be composed of multiple criteria. For example, if the Project Manager receives a telephone call from a contractor to discuss production line problems, criteria 1, 6, 8, and 13 would be an appropriate shorthand entry. This is derived because the call was incoming (1), was from a civilian outside DOD related to program activities (6), was telephonic (8), and was a consulting/advising type activity (13). If you feel more comfortable using a narrative format, an equally effective technique is shown in the following example: "Call from Contractor, production line problems". Further, shorthand and narrative entries may be combined if you find that some entries better lend themselves to shorthand than do others.

In some cases only one criteria will apply to an event. A visit to the PX is an example of a one event entry (Criteria 19).

At attachment two is a sample daily log illustrating techniques that may be used in recording data. This format is only a recommendation. Selecting a method for recording the Project Manger's daily activity remains his perogative. However, it is imperative that all entries be as complete and detailed as possible.

## SURVEY CRITERIA

GENERATING ACTION
1. Incoming to Project Manager
2. Generated by Project Manager

INITIATED BY/DISPATCHED TO
3. Superiors
4. Subordinates
5. Lateral and Diagonal Activities in DOD
6. Civilians outside DOD related to Program activities
7. Civilians outside DOD related to personal affairs

COMMUNICATIONS CONDUCTED BY
8. Telephone
9. Written
10. Two-Person talks
11. Meetings

ACTIVITY ELEMENT
12. Planning
13. Consulting/Advising
14. Directing/Controlling
15. Coordinating/Staffing
16. Reviewing
17. Thinking/Researching
18. Briefings/Presentations
19. Non-managerial/Personal affairs

HEALTH/WELFARE

A. Sleep
B. Meals
C. Commuting to and from work
D. Arrival at work
E. Relaxing after duty hours
F. Home and family chores
G. Church/Personal and family entertainment
H. Job related social affairs
I. Personal affairs (Getting ready for work, grooming, etc.)
J. Other
K. Precede all job related work done enroute or at home by the "J" criteria code.

| HOUR | EVENT |
|------|-------|
| 0001 | |
| 0100 | |
| 0200 | |
| 0300 | |
| 0400 | |
| 0500 | |
| 0600 | |
| 0700 | |
| 0800 | |
| 0900 | |

DAILY LOG

| HOUR | EVENT |
|------|-------|
| 1000 | |
| 1100 | |
| 1200 | |
| 1300 | |

| HOUR | EVENT |
|------|-------|
| 1800 | |
| 1500 | |
| 1600 | |
| 1700 | |

| TIME | EVENT |
|------|-------|
| 1900 | |
| 1900 | |
| 2000 | |
| 2100 | |
| 2200 | |
| 2300 | |

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